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AUTHOR Drezek, Stan F.; And Others
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ABSTRACT

The advice of evaluators is useful in the planning of program objectives because the program will eventually be evaluated on the basis of these objectives. This paper provides two tools for the development of program objectives. The "Levels of Program Objectives" method focuses on the intended outcomes of a program. The levels range from the resource, activity, and client learning/input levels to the instructional process and student outcome levels. The "Objectives Checklist" method questions the clarity, significance, and the measurability of each program objective. These provide program objectives that are a meaningful basis for evaluation. (CJ)

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Education Service Center, Region 20
Dwain M. Estes, Executive Director
Evaluation Services
Alan L. Roecks, Coordinator
1550 N. E. Loop 410
San Antonio, Texas 78209
Phone: 512-828-3551

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PROGRAM OBJECTIVES

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Stan F. Drezek
Dwain M. Estes
Alan L. Roecks
John H. Andrews

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Stan Drezek, Dwain Estes, Alan Roecks, and John Andrews
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Program Objectives

Stan Drezek, Dwain Estes, Alan Roecks, John Andrews

Education Service Center, Region 20

Most federal and many state educational programs require program staff to develop objectives which become the basis for program evaluation. Evaluators are often asked to assist in the program planning process. This paper provides a framework for thinking about objectives and two concrete tools. These tools, the "Levels of Program Objectives" and "Objectives Checklist," are being used in the authors' work reviewing program objectives for a large, intermediate educational service agency. They have been applied to over 80 educational programs and 500 objectives. Several hundred of these objectives are now being implemented.

Running head: Program Objectives

Author's note: This article is based upon a paper presented at the Southwest Educational Research Association annual meeting. San Antonio, February 7-8, 1980.

Program Objectives

Many educational programs require objectives as a basis for program evaluation despite the movement in educational evaluation away from objectives. The drift from objectives, however, was based on a very narrow concept of objectives. By returning to a broader meaning for objectives, focusing on priority objectives, and using the tools provided in this paper, the practicing evaluator can successfully assist in program planning and, if required to evaluate objectives, can have a meaningful basis for evaluation.

Up until the mid-1960's three definitions of evaluation were common. Evaluation was defined as either: (1) nearly identical to measurement, (2) the professional judgment of independent experts comparing the object evaluated against a set of criteria written by committees of experts, or (3) the comparison of performance data against prespecified objectives (Stufflebeam et al, 1971; Worthen & Sanders, 1973; Glass, Note 1). Between the early 1930's and the mid-1960's, it was the objectives-based approach which dominated evaluation (Guba, Note 2).

In the last decade new definitions and approaches to evaluation have emerged. As early as 1969, Glass (Note 1) had evaluated the objectives-based approach as having reached the limits of its growth. More recently Webster and Stufflebeam (Note 5) reported for thirty-four large urban school districts that the new decision-oriented approach had the greatest effect on the development and operationalization of these districts' evaluation activities. The Webster and Stufflebeam paper labeled objectives-based

studies as quasi-evaluation.

Proponents and opponents have debated the status of objectives in program evaluation for years. Proponents assert that objectives help decide what content to teach, design relevant instruction, and evaluate instruction (Baker, 1974; Popham, 1975). Opponents argue objectives require a lot of time, emphasize formal and trivial as opposed to substantive and important aspects of instruction, make us feel guilty about responding to circumstances not known at the time the objectives were formulated, and alienate the student from intellectual activity (Popham, 1975; Scriven, 1972; Welsh & Hambleton, 1976).

What many reject in "objectives" is how objectives have been operationalized. Evaluation blossomed in response to the idea that educators could "engineer" better education just the way scientists and technologists engineered the Space Program. Operating within the metaphor of scientific engineering the term "objectives" has come to denote a focus on overly precise, often unimportant, behavioral indices as opposed to general, important, learning outcomes (Baker, 1974; Cooley, 1978; and McAshan, 1977). Ralph Tyler himself (Shane & Shane, 1973) commented on looking back on educational objectives over the years, that "objectives" as a term had come to mean something far more specific than its original usage.

Wergin's (1976) review of the literature suggests the most important decision relating to a program is to invest organizational resources in the program and its objectives in the first place. Instead of overly

precise and unimportant indices of program accomplishment, we must write priority objectives that are the broad, important program outcomes. These are the outcomes which must be achieved or the board, advocacy group, special interest representation, or funding agency will surely question program funding. They are so vital that program staff believe they must be accomplished. For a $30,000 program or program component, this might be just one objective. How do we develop these objectives?

Tools to develop objectives

Levels of Program Objectives, Figure 1, presents an idea which is basic to any systems theory positing inputs, processes, and outcomes and hierarchical systems. Many planning, evaluation, and curriculum development "models" developed during the last twenty years have employed these concepts. As simple as the levels idea is, it increases the probability of meaningful objectives. One of the most systematic implementations of this concept by an evaluation organization occurred in the mid-1970s at Austin (Tx.) Independent School District (Note 3). Our elaboration borrows heavily from that office's early work.

Insert Figure 1 about here

This simple approach focuses on students and the outcomes the program intends students to evidence. We term this level student outcome.

We divide the many hierarchical systems in education into two broad classes: support programs and instructional programs. Instructional programs are programs whose immediate purpose is to engage the student in learning. Support programs are all the other educational programs whose outcomes

facilitate instruction; however, they do not directly teach students. Obviously the support programs themselves occur at many levels. For an example of hierarchical order among support programs consider the following: a university teacher training program, a school district personnel selection system, a school district inservice education system, and, finally, the instructional program. We believe educational planning is fortunate in dealing with just the two broad classes of instructional and support programs at this point.

We conceive the instructional program to include input, instructional process, and student outcome levels. We use these terms in the broadest sense of familiar usage. Student outcome is student performance. The focus of an objective at this level is to define the good which our students will evidence in their behavior. Instructional process means whatever occurs between the student and his instructors or instructional media. It includes all variety of instructional technology. The focus of an objective at this level is to define the unique, powerful instructional transaction that is to transfer the rich mix of inputs into important outcomes for students. Input means the money, staff, time, and material resources dedicated to the instructional process to come. The focus of an objective at this level is in specifying the "key ingredient"--the input that is so vital, e.g., a minimum amount of student time, that its absence would preclude accomplishing student outcomes.

Support programs have as their one purpose producing client learning and products which can become inputs to the instructional program. We

conceive these support programs to include resource, activity, and client learning/product levels. These terms are synonyms for the inputs, processes, and outcomes of the instructional program. Again we are using these terms in their broadest, most familiar usage. Client learning/product means the knowledge, attitude, skills, or tangible capital gained by the client or school system as a result of activities in the support program. The only purpose of these gains are as inputs to the instructional program. Support program objectives at this level focus on the critical learning or product. For example, a training program might focus on a key instructional competency, e.g., level of classroom questioning. A resource provision program might focus on providing a certain set of materials (product) to be used in the instructional process. Activity means the training, assistance, information dissemination, facilitation, or manufacturing which the support program undertakes to transform its own resources into learnings and products of genuine usefulness to the instructional program. Resource means the money, people, time, and material resources of the support program. The best way to understand this terminology is to examine a set of priority objectives; Figure 2 presents one set for a home-based program for early childhood students. The instructional program's student outcome objective specifies increased developmental rate as the behavior which students will evidence on the Learning Accomplishment Profile. Each priority objective logically relates to the accomplishment of this student outcome.

Insert Figure 2 about here

The instructional process level specifies student completion of activities in the Homebased Model as the priority objective. This program sees the activities comprising the Homebased Model as the most powerful instructional transaction for increasing developmental rate. At the input level the key ingredient is a staff competency: trainee knowledge of the process for implementing Homebased Model activities. Without this knowledge the instructional process would fail and developmental rate could not be increased.

At the support program's activity level the training of teachers to a certain criterion level on a well-defined posttest is the essential program activity. Without this training the teachers could not implement Homebased Model activities. At the support program's resource level the production of the training program, a tangible product presumably worthy of dissemination, is the key program product.

Every program has in reality multiple objectives at all these levels. What the priority objective concept does is to force program and evaluation staffs to focus on key objectives which, in a sense, is synonymous with developing a theory about how the program operates. This theory is so basic to the program that program staff would readily admit the implications of not accomplishing an objective.

What have we found as we attempted to apply these ideas? In general, in applying the levels and priority idea to sets of objectives we found: (1) instructional and support programs' objectives tended to enphasize process as opposed to outcome levels, (2) program staff tended to view all objectives of equal importance and, therefore, many priority objectives

were lost among tangential objectives, (3) program staff tended to develop too many objectives, (4) resource and input levels tended to get ignored, even when they were the most important tangible residue of a program, and (5) the agency tended to repeat objectives from program to program so many programs were really variations on the same model, and (6) as a consequence, objectives were often "contentless." Furthermore, we found at both the state and local agency level lack of support for clarifying objectives. We will never forget our first hard year trying to clarify and focus objectives and the cries of "Evaluation is trying to run my program." (Roecks, Note 4). We use an Objectives Checklist to feed back to program staff our suggestions on their objectives.

Tools to develop objectives: Objectives Checklist

Figure 3 is a copy of a completed Objectives Checklist. We have found five key questions need to be asked about each priority objective during its development. A draft objective addressed by way of example is: "By May 31, 1979, at least fifteen of the trainees will have implemented the Homebased Model in their districts as evidenced by:

1) actions of the LEA substantiating this instructional arrangement for at least ninety students,

2) case records substantiating completion of teaching activities,

3) documented student growth on a selected developmental instrument."

Insert Figure 3 about here

The first question asks if the objective is clear. The best test of this question is to have two persons independently visualize the

intent and describe it to the reviewer. In this case we found a confusion in intent. The objective was really intended to be implementation of training, but it included a reference to student outcome. We recommended dropping this aspect.

The second question asks if the objective is significant. The test we use is asking ourselves if the objective relates to an identified need of our clients or a corresponding organizational goal. In this particular case we had two years of case notes documenting three to five-year-old handicapped children in outlying districts whose parents would only have them served at home. We also had requests from six special education directors for this service.

The third question uses the ABCD criteria (Note 6) to judge the formal aspects of the objective. Usually considerable feedback is needed on these characteristics of objectives. Particularly troublesome is matching the behavior and degree to the level of the objective. The audience criteria often elicits client comments on cost-effectiveness. Of course, the interpersonal relations between evaluation and program staffs is the key to moving toward meaningful priority objectives.

The practicing educational evaluator confronted with the task of assisting in the development of objectives has the tools he needs. Our experience substantiates the usefulness of these tools in developing priority program objectives. By returning to the meaning of objectives as defined in this paper evaluators will be helping to plan meaningful programs and if required, evaluating well-stated, worthwhile, practical objectives.

Program clients will experience better-planned, more successful programs. That is the purpose of evaluation.

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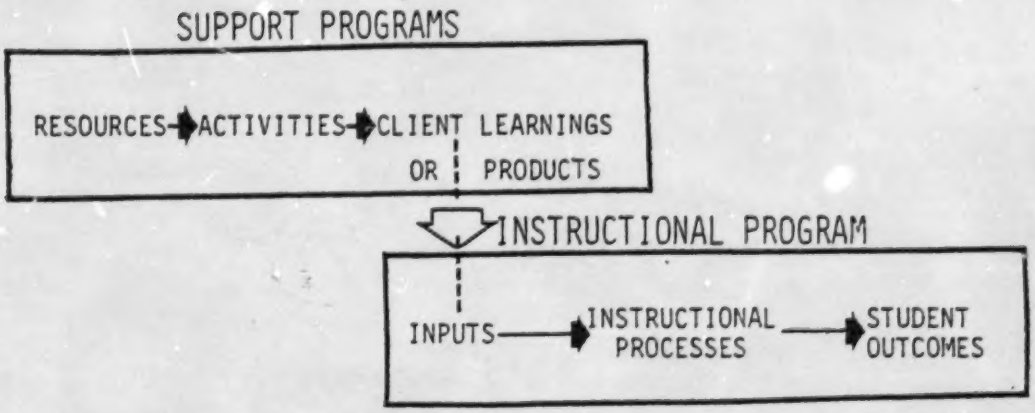
Figure Captions

Figure 1. Typology of objectives adapted from the Austin (Texas) Independent School District Office of Research and Evaluation (Holley, Note 3).

Figure 2. An example set of program objectives.

Figure 3. A completed Objectives Checklist illustrating the objectives review process.

LEVELS OF PROGRAM OBJECTIVES



STUDENT OUTCOME LEVEL:

By May 31, 1980 at least two-thirds of ninety handicapped early childhood students will have a greater developmental rate during the project year (given attendance of at least 10 hours per week) than their developmental rate before entering the program, as evidenced by a 10% increase in developmental rate on the Learning Accomplishment Profile.

INSTRUCTIONAL PROCESS LEVEL:

By May 31, 1979 at least fifteen of the trainees will have implemented the Homebased Model in their districts as evidenced by: (1) actions of the LEA substantiating this instructional arrangement for at least 90 students and (2) case records substantiating completion of student activities.

CLIENT LEARNING/INPUT LEVEL:

Given at least three follow-up consultant visits at least twenty trainees will know the process for implementing Homebased Model activities as evidenced by demonstrating two-thirds of the behaviors on Checklist A (behaviors derived from module posttest) as observed by project staff.

ACTIVITY LEVEL:

By December 15, 1979 Homebased Model project staff will have trained at least 30 ECE-H teachers using the developed module as evidenced by (a) workshop registers, (b) 50th percentile or greater ratings on the Workshop Evaluation Form, and (c) 80% correct items on the posttest.

RESOURCE LEVEL:

By September 30, 1979 Homebased Model project staff will have developed a training module for the Homebased Program as evidenced by the module containing (a) specific trainee objectives, (b) pre/posttests covering these objectives, (c) five days of activities leading to the accomplishment of the objectives, and (d) lists of supplementary media.

PROGRAM OBJECTIVES CHECKLIST

PURPOSE: To document Evaluation Services' suggestions on clarity, significance, and measurability. The degree statement is the responsibility of Evaluation Services. The relationship of objectives to ESC-20 goals and regional needs is the responsibility of Planning & Development.

Program Title IV-C Reviewed by Stan Drezek Date 2-7-79

Objective No. 1 Level Instructional Process

1. Clear: "3" in degree statement confounds the intent; it should be dropped
   Enables different readers to picture same intent; simple sentences; not ambiguous
2. Significant: Tangible results -- 90 students served whom LEAs might not ordinarily have served
   Of genuine worth; tangible results; appears to relate to Center goals
3. Measurable:
   a. Audience: okay -- but isn't 15 a bit low? That would cost us $4000 per teacher
   b. Behavior: we need to cite the page number defining the attributes of the Home-based Model to be sure our readers know we are referring to a concrete model and not a fuzzy idea
   c. Conditions: okay -- perhaps you could add the phrase, "given consultant support"
   d. Degree: Drop "3." "1" is a bit confusing; perhaps change to "90 students' IEPs state the Home-based Model is the instructional arrangement." For "2," we need to work out an acceptable degree -- perhaps a certain number or percentage of activities.

Objective No. _____ Level _____

1. Clear: _____
   Enables different readers to picture same intent; simple sentences; not ambiguous
2. Significant: _____
   Of genuine worth; tangible results; appears to relate to Center goals
3. Measurable:
   a. Audience: _____
   b. Behavior: _____
   c. Conditions: _____
   d. Degree: _____

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Objective No. _____ Level _____

1. Clear: _____
   Enables different readers to picture same intent; simple sentences; not ambiguous
2. Significant: _____
   Of genuine worth; tangible results; appears to relate to Center goals
3. Measurable:
   a. Audience: _____
   b. Behavior: _____
   c. Conditions: _____
   d. Degree: _____

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